DOI: https://doi.org/10.53378/352902



Efficacy of the Computerised Schools Selection and Placement System in Bono Region of Ghana

¹Potencial Mark Gborsongu & ²Leo Andoh Korsah

Abstract

The purpose of the study was to provide a proposal for discussion on the future of the Computerised Schools Selection and Placement System (CSSPS) as a means of selecting and placing Junior High School (JHS) candidates into Senior High Schools (SHSs) in Ghana. The cross-sectional descriptive design and the multi-stage stratified random sampling procedure were used for the study. The sample consisted of 170 SHS 1 students, 102 JHS 3 candidates, 55 parents and 8 headmasters. The main instrument used for the collection of data was the questionnaire. The statistical tool employed in all cases for the analysis of the research questions were frequencies and percentages. The findings of the study indicated that to a very large extent, the objectives of the CSSPS (reducing stress of parents, eliminating human errors in the placement process, etc.) have been met. However, parents have the perception that corruption and protocol admissions still exist under the CSSPS especially at the secretariat. The study recommended that on the issue of corruption and protocol admission, the Ministry of Education should set up a special team to investigate the issues as they pertain to the CSSPS Secretariat and offenders brought to justice. In order to increase transition to SHS, the Ministry of Education should endeavour to expand the infrastructure in existing senior high schools in the region so as to increase access.

Keywords: Efficacy, Computerised Schools Selection, Junior High School, Placement System, Senior High School, Protocol Admission

Article History:

Received: May 23, 2022 **Revised**: July 11, 2022

Accepted: July 12, 2022 Published online: July 19, 2022

Suggested Citation:

Gborsongu, P.M. & Korsah, L.A. (2022). Efficacy of the Computerised Schools Selection and Placement System in Bono Region of Ghana. *International Journal of Educational Management and Development Studies*, Volume 3 Issue 3, pp. 41 - 61. DOI: https://doi.org/10.53378/352902

About the authors:

¹Corresponding author. Holds a Master of Philosophy in Educational Planning, an Assistant Secretary at the Methodist College of Education, Akyem Asene-Aboabo, Oda, Eastern Region, Ghana

²Holds a Master of Philosophy in Religious Studies and a Postgraduate Certificate in Education, a Senior Tutor and the Ag. Vice Principal at the Methodist College of Education, Akyem Asene-Aboabo, Oda, Eastern Region, Ghana



1. Introduction

Ghana's education system has been characterised by several changes since independence. Successive governments have often been dissatisfied with the education system that they inherited from previous governments (Steve, 2009). Several attempts have therefore been made by various governments to review or reform the educational system to make it more relevant to national needs. This is evident in the numerous reform and review committees that have been set up by successive governments to examine the existing system and make recommendations for improvements.

According to Steve (2009), there have been three major educational reforms since independence in 1957, 1961, 1967 and 1987. Steve further states that, there have also been several reviews of the education system, notably those in 1966, 1974, 1993, 2003 and 2007. However, the search for an ideal education system for Ghana has remained elusive. Education reform has been defined as a plan, programme or movement which attempts to bring about a systematic change in educational theory or practice across a community or society. Education reforms have been carried out in Ghana for a variety of reasons.

About three decades ago, Government of Ghana initiated a new educational reform which permeated the entire system of education from primary to university level. This reform was based on the Evans-Anfom's Commission on Education report in 1986. This reform changed the structure of the educational system from seventeen years to twelve years at pre-university level. That is, the Evan-Anfom report recommended 6 years primary, 3 years Junior Secondary and 3 years Senior Secondary education. The reform led to the total replacement of the old pre-university educational system. The middle schools were eliminated. The common entrance examination (CEE) used for selection and placement into secondary schools was replaced by the Basic Education Certificate Examination (BECE). This was to solve the deficiencies in the system.

The long-term objective of the reform was to achieve universal basic education, expand, and increase access to secondary and tertiary education. To achieve this, the education system was given a new approach with emphasis on diversification of content and quality. With the aim of increasing access to secondary and tertiary education, the Basic Education Certificate Examination (BECE) was seen as the best option. The BECE results are currently used to select and place candidates into Senior High Schools, Technical or Vocational Institutes.

With the adoption of the BECE, selection and placement of qualified students into second cycle schools of their choice was performed manually until the introduction of the Computerised Schools Selection and Placement System (CSSPS). Prior to the CSSPS's introduction, heads of Senior High Schools and Technical/Vocational Institutes together with Ghana Education Service (GES) officials converged at selected regional centres to conduct the selection exercises annually. The manual system was however beset with several problems. The process of selecting and placing qualified candidates into second cycle institutions of their choice was often very slow and laborious.

According to Owusu-Fordjour (2011), the problems associated with the manual system include difficulty in handling large numbers of qualified students as the number of registered candidates increased every year, prospective Junior Secondary B.E.C.E candidates were restricted to choosing all their preferred Senior Secondary Schools from one region of the country, the entire process was vulnerable to pressures from parents / guardians and also abuse / misuse of discretionary powers of public servants in charge of the system, the system caused a lot of anxiety, frustrations and confusion especially for parents of qualified candidates and was also susceptible to problems due to movements of registration cards and delays in the placement of such candidates and loss of confidence in the old system by the public and the credibility of some headmasters/headmistresses on the selection process were very questionable. As a result, the CSSPS was then introduced in September 2005 with a view to addressing most of the above problems if not all. It has been suggested that implementation of the CSSPS has brought several advantages including, efficiency, simplicity and speed in the procedure of selection and placement.

It has also removed regionalised selection constraints by allowing the choice of schools from any combination of regions. It seeks to promote fairness and equity by enabling candidates who performed well to gain admission to their choice irrespective of whether the school is a 1st, 2nd or 6th option. The system also ensures that no school admits more students than vacancies available in each programme. It has also led to reduction in human error during the process of capturing registration data. Easy access to placement results through SMS where a candidate only texts his/her ID and instantly receives a reply on his/her placement status indicating the secondary school where he/she was placed and the program is an added advantage.

Since its introduction in 2005, the CSSPS has brought about a great deal of relief for both parents and heads of institutions. Compared to the manual method of selection and placement,

parents and guardians now see the CSSPS as being more objective than the manual system. Owusu-Fordjour (2011) stipulated that the country also stands to benefit from the CSSPS and these include: the system will in one way or the other ensure good governance. The government's long-term objective of achieving universal basic education, expanding, and increasing access to secondary and tertiary education will be realized; there will also be a reduction in class societies since the system does not discriminate between the rich and the poor; national integration will eventually be enhanced through the system's ability to allow students to choose schools from more than one region; and teaching and learning will also be improved through CSSPS since selection and placement is done on merit.

Under the CSSPS, candidates who for various reasons defer their admission into SHS/Technical/Vocational Institutes in their qualifying year are considered for placement. They are referred to as re-entry candidates. Reasons for deferment include but not limited to transfer of parent/guardian, health, loss of parent/guardian, retirement, and dissatisfaction with placement.

As a policy, candidates who sat for the BECE three years back are eligible as re-entry candidates in a particular placement year e.g., for 2010 re-entry candidates are candidates who sat for the BECE in 2007, 2008, and 2009. Re-entry candidates are mandatorily required to fill re-entry forms in order to make them eligible for the placement exercise. The forms are designed and printed by the CSSPS Secretariat and sold by GES. The forms are obtainable at all District Education offices at a fee (Ministry of Education, 2007).

The Microsoft Net framework was used as the basis for the development of all the modules of CSSPS. The NET Framework is a computing platform that simplifies application development in the highly distributed environment of the Internet. CSSPS utilises an N-Tier based architectural framework to develop the components for the application.

According to Baiden-Amissah (2006), the CSSPS sought to increase the number of qualified students enrolled in the second cycle schools throughout the country by 16% irrespective of where the school is located and whether or not it is a community type. However, there have been several allegations by stakeholders concerning the reliability and efficiency of the CSSPS. One of such allegations was that of the Ghana National Association of Private Schools (GNAPS) to the effect that 'top ups' of up to 5 points were given to public school candidates as a means of securing a leverage with private schools. This, according to GNAPS was among the reasons private school candidates were the most hit by the CSSPS crisis of 2009.

These were some of the causes of the CSSPS crisis in 2009, and not just being unfair and inefficient (Asare, 2010).

In a study conducted by Frimpong (2011), on the assessment of the CSSPS in the Central Region, it was revealed that most stakeholders (parents, students and headmasters/headmistresses) said the system is not fair to all students. It was also revealed that headmasters and headmistresses strongly disagreed to the fact that the CSSPS has eliminated corruption. Frimpong further found that within the first three years of the implementation of the CSSPS in the Central Region, the transition rate from JHS 3 to SHS 1 had reduced. The question therefore is, after fifteen years of its implementation, is the CSSPS addressing issues compared to the manual admission process or is it creating problems? Questions such as these motivated the researcher to assess the CSSPS in the Bono Region fifteen years after its introduction.

Generally, this research paper is to provide a platform for discussion on the future of the CSSPS, based on the strengths, weaknesses and the possible threats of the system and assessment of its effects on students, parents and headmasters/headmistresses. The specific purpose of the paper is to assess the extent to which the CSSPS has achieved its objectives in the years of implementation. The following research questions guided the study:

- 1. To what extent has the CSSPS been able to achieve its objective?
- 2. How has the CSSPS addressed the issue of equity in SHS admissions?
- 3. To what extent has the CSSPS affected enrolment trends in rural and urban SHS in the region?
- 4. To what extent has the CSSPS addressed the issue of perceived corruption in school placement?

2. Literature review

The computerized CSSPS which was introduced in 2005 by the Ministry of Education (MoE) and the Ghana Education Service (GES) came at a time when most parents, students, headmasters/headmistresses as well as other stakeholders were agitating for a change in the manual system of the selection and placement of BECE candidates. The CSSPS then came with the view of addressing most of the problems which were associated with the manual system of selection and placement of BECE candidates into second cycle institutions.

2.1. Theoretical framework

The literature review is based on John Stacey Adams' theory of equity and social justice. According to Adams (1965), the theory of equity and social justice is where people perceive a situation as fair or unfair when their own ratio of outcomes to inputs is the same as those of others with whom they compare themselves. Outcomes are the perceived receipts from a social interaction or exchange, including material benefits, social status, and intrinsic rewards, and inputs are the perceived contributions, including material contributions, seniority, education, skills, and effort. In terms of the theory, Adams says inequity is felt as uncomfortable even when it is in an individual's favour. It tends to generate behaviour aimed at restoring equity, such as altering inputs or outcomes or cognitively distorting them, leaving the field, attempting to distort the other person's perceptions of inputs or outcomes, or changing the person used as a point of comparison.

The equity theory deals with two questions (a) what do people think is fair and equitable? and (b) how do they respond when they feel they are getting far more or far less from their relationships than they deserve? How do they react when they see their fellows reaping undeserved benefits – or enduring undeserved suffering? This study is about finding out if there is equity in the computerised system of selection and placement of BECE candidates into the various second cycle schools. This is because our public education system has both a moral and legal obligation to educate all children equitably. If inequities arise, then the system offers avenues for redress. Equity is therefore a primary commitment of the public education system.

Therefore, it is to measure the CSSPS against this theory to find out if the system is being fair and equitable to all students. To be able to make a holistic assessment of the CSSPS, some existing related literature has been reviewed in order to find out the knowledge that already exists on the topic.

2.2. Computerised Schools Selection and Placement System (CSSPS): Policy Guidelines for Selection and Placement

Various governments have initiated several policies and reforms to address the deficiencies in the education system. The long-term objectives of these policies were to achieve universal basic education and also expand and increase access to secondary and tertiary education. Throughout these reforms the process for selection and placement of candidates from

basic level to secondary or Technical/Vocational Institutes was done manually. Students with aggregate 6-30 were deemed to have qualified for selection into any second cycle school.

The manual system was for many years a source of stress and frustration to parents, heads of schools and candidates alike. In order to minimise the occurrence of most of these problems and to ensure that the government's objective of increasing access to secondary education is achieved, the Ministry of Education (MoE) and the Ghana Education Service (GES) adopted a policy to computerise the selection and placement of candidates into Senior Secondary Schools and Technical/Vocational Institutes (Ministry of Education, 2007). The CSSPS was introduced in 2005 and has replaced the manual system of selection and placement of candidates.

The computerised system uses the total processed raw scores of six subjects instead of grades of each candidate for the selection. The number of subjects for selection into Senior High Schools is six (6), and comprises four (4) Core Subjects namely; English Language, Mathematics, Integrated Science, Social Studies and two (2) other best subjects. For Technical Institutes the subjects are English Language, Mathematics, Integrated Science, Basic Design and Technology and two (2) other best subjects. To qualify for admission, a candidate's grade in any of the four subjects is expected not to exceed five (5). The minimum grade for each of the best two subjects (elective) should not exceed six (6); and if added to the four core subjects, must not exceed an aggregate of thirty (30). A candidate whose grade for any of the core subjects exceeds five (5) or whose subject(s) is/are cancelled by WAEC is deemed not qualified for selection and placement (Ministry of Education, 2007). Candidates are free to choose their six (6) schools from any number of regions they wish. This is due to the fact that all selection and placement of candidates will be done by the computer software in one location. Each candidate will have six (6) choices of schools and programmes. For example: First choice - School and Programme, Second choice - School and Programme, Third choice - School and Programme, Fourth choice -School and Programme, Fifth choice - School and Programme, Sixth choice - School and Programme. Where there is a problem of non-placement after the 6th choice, such candidates are listed and the list is processed by the CSSPS Secretariat as special cases.

There are three types of second cycle schools. These are Senior High Schools, SHS/Technical Schools and Technical/Vocational Institutes. Candidates are free to choose from any of these schools. However, the six (6) choices must be listed in order of preference and the correct code for each indicated on the registration entry forms. Candidates also must ensure that their preferred programmes are offered in the schools of their choice. There should be no

confusion between the programmes offered in Senior High Schools and courses offered in the Technical/Vocational Institutes (Ministry of Education, 2007).

2.3. The use of Scaling Factor to address Urban-Rural Admission Disparity

According to the CSSPS Policy guidelines (2007), a scaling factor of 0-10 is used for Public Schools as a mechanism to address the disparity or the gap between the disadvantaged rural candidate and the well-endowed urban candidate. Furthermore, about 30% allocation of vacancies declared is reserved for Public Schools and the 70% competed for by both the Public and Private. These according to the Ministry of Education are factored into the design of the software (Ministry of Education, 2007). It is further stated in the CSSPS policy guidelines that 10% catchment area allocation are to be considered as special admissions. This includes candidates for Seminaries and requests of key stakeholders. However, in our view the question of fairness to access will be raised if these special admissions are to be enforced because CSSPS might then create avenues for protocol admission especially when key stakeholders can request for a place for candidates. This also in line with the findings of Frimpong (2011), that the CSSPS is not fair to all candidates and that there is the problem of corruption and protocol admissions. Babah et al. (2020) also affirm the existence of such cankerous practice which is contributing to the unfairness of the CSSPS.

2.4. Corruption and Protocol Admission

Nkansah (2022) asserts that some vacancies are reserved for protocol so that stakeholders of the school can bring in their candidates for admission. This is done to serve as a reward or motivation for such stakeholders as a result of their contribution to the school. To get admission through such protocol, one must consult a stakeholder in a senior high school for assistance with their privileges. In our view, Nkansah's assertion breeds bribery and corruption as some stakeholders are alleged to make monetary demands in exchange of extending their privileges to those in need of protocol admission.

One of the reasons why the government, in close collaboration with the Ghana Education Service (GES) decided to abolish the old manual system of admissions into Senior High Schools and the subsequent introduction of the CSSPS was the alleged corruption that had characterised the former. However, in a publication made in the Chronicle newspaper, Owusu-Fordjour (2011)

indicated that some of the staff at the CSSPS secretariat were manipulating the system to serve their parochial interests, instead of the nation. According to the reporter, some staff at the secretariat collected bribes from parents before their wards were posted to schools of their own choice. He further stated that a parent who was a victim to this scam told the newspaper that because some staff at the CSSPS secretariat, had access to the placements before they are released by the GES, they are able to change some of the placements to favour those who were ready to pay. For example, a student posted to Sunyani Senior High School can be removed and replaced with a student who was posted to a different school like Adehyeman Senior High School, if the parent of the latter pays bribe. Similarly, the parent stated that, a student posted to St. James Seminary/Senior High School to read Science can have his course changed to General Arts, and if a parent who wants his ward to read Science, but did not get the course, could have it changed if they were prepared to pay a fee, the report emphasized.

Therefore, what seems to be happening under the carpet according to the Chronicle report is that parents who are dissatisfied with the choice of school of their wards then pay an illegal fee and the ward is sent to the school of his or her choice, by sacrificing a student who has qualified and been selected for the same school on merit. This corrupt practice is said to have denied most students the chance to enroll in schools they had initially been posted to by the CSSPS, and to also read the course of their choice. It seems this alleged corruption has escalated to the extent that the Director General (D.G) of GES in 2022 issued a statement requesting the National Intelligence Bureau (NIB) to investigate the allegations of corruption in the placement of students under the CSSPS (Daily Graphic, 2022).

2.5. Progress towards equitable access to quality Secondary Education in Ghana

The demand for secondary education has grown. Prior to 2007, secondary school enrolment has grown by as much as 60 percent, although the completion rate of 34 percent in 2006 suggests dropout is still high (Ministry of Education, 2007). Secondary school net enrolment also stood at about 13 percent after stagnating at 10 percent for about a decade. What this means is that, the proportion of secondary school students not of the appropriate age for secondary is high. Therefore, despite the relatively high enrolments, the secondary education system has not been very efficient in delivering high numbers of graduates for further education and the labour market (GOG, 2002). Moreover, the Presidential Commission on Education

Reforms in Ghana in 2007, examined the reasons why most JHS students were unable to access senior high school education, and blamed this on a number of factors: inadequate facilities and infrastructure, parents unable to afford secondary fees, a lack of alternative tracks for students with different interests and abilities, an inability of students to meet the minimum requirements for further education and a lack of interest in further education (GOG, 2002).

Similarly, according to Akyeampong (2005), the diversification of secondary education meant to open up opportunities for the different aspirations and abilities of students, as well as improve streaming into different post-secondary education and training never fully materialized. One reason was that the quality of practical education students received depended on whether they attended a school in a rural or urban area. Generally, there is better quality provision in traditional boarding schools located mostly in cities and towns than in community day secondary schools found mainly in rural areas.

The traditional schools attracted more qualified teachers than the community schools. Teacher shortages in the technical/vocational subject areas effectively reduced quality of provision and undermined student interest (Akyeampong, 2005). Perhaps the most important influence on students' subject choice according to King and Martin (2002) is the opportunity structure outside the school system. This has proved to be decisive for some students when it comes to selecting school subjects, and increasingly, many of these students are seeing Liberal Arts and Science subjects as offering better opportunities than Vocational and Technical subjects. When in the mid-90s, Peil as cited in Akyeampong (2010) asked the adult population of residents in Madina (a suburb of Accra in the Greater Accra region), which subjects they studied were most valuable to them, about a third said Reading, a fifth Mathematics, a quarter both of these, only 7 percent indicated vocational subjects. This says something about the importance attached to core skills in numeracy and literacy for economic survival, and seems to support the assertion that realism about labour market opportunities in Ghana has much to contribute to job aspirations among students.

Over the years, the ideological sentiments associated with technical and vocational secondary education have made sure that it remains at the forefront of education policy. This was to get most students to access Technical and Vocational education. However, what this does not take into account is the pragmatic implication of costs, and how that might affect equitable access to quality. According to Akyeampong (2005), community secondary schools which were introduced under the 1987 education reforms to make secondary education more affordable and

accessible to students in rural populations, lacked adequate infrastructure, teachers and equipment to support their practical focus. The lesson is that, implementing a large-scale diversified curriculum under resource constraints creates uneven access to quality and choice of secondary subjects. According to Lauglo and MacLean (2005), it is better to emphasize standard and problem-solving skills in secondary education as foundation for further training in post-secondary technical and apprenticeship institutions. This has also the potential of providing better access to secondary education.

Generally, secondary education is faced with the challenge of providing equitable and meaningful access so that dropout reduces and learning achievements improve significantly. An additional challenge is the rising cost of secondary education to both government and parents and the potential that this has on constraining future growth (Akyeampong, 2005). Akyeampong further states that international evidence suggests that the quality of secondary education, especially in Mathematics and Science, has a stronger impact on economic growth than years of schooling. This might be one of the reasons why the CSSPS uses candidates' scores in Mathematics, Science and English among others to grade them.

Equitable access to secondary education for poor students, and especially girls is an additional factor enhancing countries' economic growth performance (World Bank, 2007). But this also depends on an adequate supply of qualified teachers who can generate interest in Science and Mathematics through innovative teaching. Ghana's progress against these international benchmarks reveals that a development in secondary education still has a long way to go. Expansion in secondary education has predominantly taken place in the General Arts subjects of which the relative size has grown relative to other subjects. This is a way to get more students access to secondary education. Meanwhile, Technical, Vocational and Agricultural streams have all declined, either because schools do not have the capacity to offer more specialist subject or newly created schools only offer a very limited curriculum (NPT, 2007).

2.6. Transition to Senior High School

According to Quist (2003), determination to expand access to post-basic education (i.e., beyond JHS, more specifically, SHS) has featured prominently in international discourse on educational access and reflects a growing recognition that access to post-basic education encourages demand for basic education. In 1996, the World Bank noted that, "raising primary

school enrolments in low-income developing countries is an important policy goal. However, achieving this goal requires more than simply improving access to primary schools. This is because access to post-primary education is an important determinant of primary school enrolment, it is equally important to expand and improve access to middle and secondary schools" (World Bank, 1996). Therefore, with the government's policy of Free Compulsory Universal Basic Education (FCUBE) and education for all, the CSSPS then intends to expand and improve secondary school participation.

Generally, the majority of children in Ghana who reach primary 6 continue to Junior High School (JHS). A good number of those who enter JHS are able to complete. The story is a little different when it comes to entry into Senior High School (SHS) where there is a significant drop. Transition rate from JHS to SHS is below fifty percent. Reformers in 1987 set the goal of reaching above 50% percent transition after the restructuring of the education system (Ministry of Education as cited in Akyeampong et al., 2007). Although numbers accessing senior secondary has increased, still only about half of those successful in the JHS leaving exam (BECE) continue to SHS.

3. Methodology

The design employed in this study is the cross-sectional descriptive survey. The design is considered suitable for this study because the main objective of the study is to review the current state of the CSSPS and measures that can be put in place to ensure an effective and most efficient means of selection and placement of qualified JHS leavers into the second cycle schools in the Bono Region. The cross-sectional descriptive design was therefore an appropriate design for the study.

The Bono region is one of the sixteen (16) administrative regions of Ghana. It is as a result of the remainder of the Brong Ahafo region when Bono East and Ahafo regions were created. The capital town of the region is Sunyani. The region has twelve (12) districts comprising Berekum East Municipal, Dormaa Central Municipal, Jaman South Municipal, Sunyani Municipal, Wenchi Municipal, Tain District, Jaman North District, Sunyani West District, Dormaa East District, Banda District, Dormaa West District, Berekum west District. The target population for the study comprises all final year JHS and first year SHS students in both private and public schools in the region. In addition to the students, parents who have their

children in final year of JHS and first year in SHS as well as headmasters and headmistresses form part of the target population.

There are 866 Junior High Schools and 58 Senior High schools totaling 924 schools (both public and private) in the region (Education Management Information System, 2019). Since the rules and regulations governing the CSSPS keeps changing with time, there was the need to use a group of people who were in their transitional period from JHS to SHS, hence the inclusion of JHS pupils and their parents. In addition, SHS 1 students, their parents and headmasters were included because they are the best group of people who have experienced the system and therefore were capable of making assessment of the system. The study had a sample size of 335 respondents comprising fifty-five (55) parents, eight (8) headmasters/headmistresses, one hundred two (102) JHS 3 pupils and one hundred and seventy (170) SHS 1 students. Fifty-five (55) parents were selected because the main emphasis of the study was on the students. The proportions method was used to obtain the required number of students in each school for the study. Krejcie and Morgan's table for determining sample sizes was used to select the sample from the population of students, parents and headmasters/headmistresses.

In order to ensure a regional representation, appropriate measures were taken to ensure students, parents and headmasters/mistresses from the various districts are evenly represented. The schools in the region were put into four categories, thus public-rural, private-rural, public-rural and public-urban schools. Best and Kahn (1998) stipulates that the ideal method of selecting sample for a survey study is the random selection, thus letting chances to determine which groups of the population to be selected. In order to ensure fairness in the selection process, the simple random sampling procedure was used to select the samples for the study.

Eight schools were selected randomly from these categories for the study thus four SHS and four JHS. The schools were made up of the following; Private – Rural JHS, Private – Urban JHS, Public – Rural JHS, Public – Urban JHS, Private – Rural SHS, Private – Urban SHS, Public – Rural SHS and Public – Urban SHS.

The multi-stage stratified random sampling procedure was used in drawing the sample. In this method, a sequence of samples is drawn from samples already selected but only the last sample of the subjects is studied. This was to allow the establishment of a sample that is directly related to the research objects (Sarantakos, 2005). Therefore, to ensure that all the different categories of students who are of interest to the study thus rural and urban, public and private are adequately represented in the sample, the multi-stage random sampling procedure was used. The

twelve (12) districts in the region were first categorised into urban and rural districts. Secondly, the schools in each of the categories mentioned earlier were further grouped into public and private schools. Finally, the schools were put under categories A-P as assigned by the Ghana education Service.

Furthermore, the table for determining sample sizes from a given population, developed by Krejcie and Morgan and cited in Sarantakos (2005) was used to determine the number of students to form part of the sample for the study. According to Sarantakos (2005), a population of 42,768 requires a sample size of about 332. The proportionate stratified random sampling, which tries to improve the correspondence between a sample and a population by structuring the sample so that its composition matches the composition of the population, was also adopted. This sampling procedure was adapted to enable to select the number of JHS 3 and SHS 1 students. The class registers for the students were used to select the individual students for the study. Thus, total of twenty-six (26) and forty-three (43) students from each of the Junior and Senior High Schools, respectively. One parent was used as well as headmasters/headmistresses of all the eight selected schools.

The research instrument adopted for the study is questionnaire. The questionnaire was used for the students and parents as well as the headmasters/headmistresses. Moreover, headmasters'/headmistress's questionnaire was in five (5) parts. The first part looked at the perceptions of headmasters/mistresses on the CSSPS. The second part assessed the extent to which the CSSPS has achieved its objectives. The third part further examined the challenges headmasters/headmistresses face as a result of the CSSPS. The fourth part also looked at the extent to which the CSSPS has addressed the issue of equity in SHS while the last part looked at how the CSSPS has affected enrolment trends in rural and urban SHS.

A pre-testing of the instrument was conducted in Twene Amanfo Snr. High/Technical School from the public urban category, Miracle Senior High private urban, Amasu M/A JHS from the public rural and Aboaboman Preparatory JHS from the private rural categories. The research instrument after the pre-test recorded a Cronbach's Alpha reliability of 0.80 for the students, the parents' questionnaire recorded reliability coefficient of 0.81 and the heads questionnaire recorded a Cronbach's alpha reliability coefficient of 0.83. The coefficients obtained indicated that the instruments were reliable, therefore only a few questions were restructured while the rest were maintained for the study. The data collected were analysed

statistically with SPSS. Both descriptive and inferential statistics were used as well as frequency distributions and percentages.

4. Findings and Discussion

Table 1Extent to which CSSPS has achieved its objectives

Indicators	Parents		Students		Headmasters	
	Agree	Disagree	Agree	Disagree	Agree	Disagree
The CSSPS has improved performance in core subjects	43 (78.2%)	12 (21.8%)	216 (79.4%)	56 (20.6%)	7 (87.5%)	1 (12.5%)
The CSSPS has reduced stress parents go through to gain admissions for their wards	38(69.0%)	17 (31.0%)	213 (78.3%)	59 (21.7%)	7 (87.5%)	1 (12.5%)
Registration of JHS candidates has been made simple	44(80.0 %)	11 (20.0%)	226 (83.0%)	46 (17.0%)	8 (100%)	0

From Table 1, majority of the stakeholders believed that generally, the new system i.e., CSSPS has met some of its objectives. This is because the headmasters (87.5%), parents (78.2%) and students (79.4%) perceived that the CSSPS has improved the performance of students, most especially in Mathematics, English Language and Science. On the issue of stress parents go through in seeking admission for their wards, the parents (69%) and students (78.3%) said that the stress they go through has reduced and this position has been affirmed by the headmasters (87.5%). The parents (80%), students (83%) and headmasters (100%) further agreed that registration of JHS candidates has been made simple, errors in placement have reduced and for that matter the CSSPS has achieved some of its objectives.

 Table 2

 Extent to which the CSSPS has addressed the issue of equity in SHS admissions

Indicators	Parents		Students		Headmasters	
	Agree	Disagree	Agree	Disagree	Agree	Disagree
The CSSPS gives preference to students in rural schools	14 (25.5%)	41 (74.5%)	119 (43.7%)	153 (56.3%)	5 (62.5%)	3 (37.5%)
The CSSPS favours female students than male students	9 (16.4%)	46 (83.6%)	67 (24.6%)	205 (75.4%)	0	8 (100%)
Students who attend private JHS are favoured by the CSSPS as against those from public schools	15 (27.3 %)	40 (72.7%)	67 (24.6%)	205 (75.4%)	1 (12.5%)	7 (87.5%)
The CSSPS favours students from rich/influential homes	31 (56.4%)	24 (43.6%)	147 (54.0%)	125 (46.0%	0	8 (100%)

The study also assessed the extent to which the CSSPS has addressed the issue of equity in SHS admissions. From Table 2, the CSSPS has considerably addressed equity in SHS admissions. Majority of the parents (74.5%) and students (56.3%) disagree that the CSSPS gives preference to students in rural schools while 62.5% of the headmasters hold the perception that the CSSPS favours candidates from rural schools. Parents (83.6%) and students (75.4) believe that there's gender equity in the placement process while all the headmasters (100%) sampled believed that female students are favoured for admission by the CSSPS. This position of the headmasters could be as a result of a conscious effort by managers of education to push the female agenda in Ghana by making sure that more females get higher education in order to breach the gap.

The CSSPS appears to give equal opportunity to all students irrespective of the type of school they attended. 72.7% of parents, 75.4% of students and 87.5% of headmasters affirmed this by disagreeing that students who attended private schools are favoured as against those in public schools. 56.4% of parents and 54% of students believed that students from rich and

influential homes are favoured by the CSSPS. This perception of the parents and students give credence to the perception of the existence corruption and protocol admissions in the use of the CSSPS. It is also a corroboration of the assertion of Babah, Frimpong, Mensah et al (2020) that there's a so-called protocol admission which affects the fairness of the CSSPS. It is also a huge dent on the efforts of achieving equity in school placement through the use of the CSSPS.

Table 3

Comparing Rural/Urban Transition Rates

Year	Average Rural Transition Rate	Average Urban Transition Rate		
	(%)	(%)		
2015	58.3	75.2		
2016	573	73.7		
2017	59.1	79.1		
2018	60.7	83.2		
2019	63.3	83.0		
2020	67.5	86.8		

Source: EMIS Data, GES Bono Regional Office.

The study assessed the extent to which the CSSPS has affected enrolment trends in rural SHS, and compared the transition rates from JHS 3 to SHS 1 from 2015 to 2020 in both rural and urban schools. From Table 3, it can be observed that from 2015 to 2020, enrolment in SHS 1 for rural schools increased from 58.3% to about 67.5% while that of urban schools increased from 75.2% to 86.8% within same period. There have been higher transition rates in the urban schools as compared to the rural schools, nevertheless, from available data above, the CSSPS has contributed to the increase in the rate of transition or enrolment to SHS.

 Table 4

 Extent to which the CSSPS has addressed the issue of perceived corruption in school placement

Indicators	Parents		Students		Headmasters	
	Agree	Disagree	Agree	Disagree	Agree	Disagree
Is the CSSPS fair?	21 (38.2%)	34 (61.8%)	154 (56.6%)	118 (43.8%)	5 (62.5%)	3 (37.5%)
Are there alternative ways to get admission?	34 (61.8%)	21 (38.2%)	118 (43.8%)	154 (56.6%)	2 (25.0%)	6 (75.0%)
Has the CSSPS ended protocol admissions?	21 (38.2 %)	34 (61.8%)	170 (62.5%)	102 (37.5%)	5 (62.5%)	3 (37.5%)

From Table 4, the observation is that the CSSPS has not successfully addressed the issue of perceived corruption in the school placement. Some respondents believed that the CSSPS is not fair; 61.8% of the parents, 43.8% of the students and 37.5% of the headmasters hold this view. This view does not represent that of all respondents though, yet it is serious and cannot be overlooked because a greater percentage of the parents held on to this position and it is important to note that it is the parents who mostly seek for the admission for their wards. This perception of unfairness corroborates the position of Frimpong (2011) and it has not changed for the better since Frimpong's observation in 2011. 61.8% of the parents said there were other ways of getting admission aside the accepted known process. This is an indication that some people manipulate the CSSPS to serve their interest. Some of them said they could pay money to some staff at the CSSPS secretariat to get their wards placed and others also said they could pay money to headmasters/mistresses to admit their children using the protocols giving to the schools. 61.8% of the parents, 37.5% of students and 37.5% of headmasters still believed in the existence of protocol admission despite the introduction of the CSSPS. This perception is in affirms the assertion of Nkansah (2022) that some vacancies are reserved for the purpose of protocol admission. The unfairness of the CSSPS, alternative means of getting admission and perception of protocol; admissions are evidence of the fact that corruption still surrounds the CSSPS.

5. Conclusion

To an extent, some of the objectives of the CSSPS have been met. However, the serious challenges of perceived corruption, perception that students from rich homes or influential backgrounds are favoured by the CSSPS and protocol admissions marred this achievement. Thus, it is believed that the CSSPS is not fair to all students although it has brought about equitable access to SHS by most students. Moreover, it is ascertained that students' performance as far as the core subjects; Mathematics, English Language and Integrated Science has improved as well as stress associated with admissions has reduced and enrolments in SHS have increased significantly.

In a nutshell, this research focused on assessing the efficacy of the CSSPS in the Bono Region from the perspective of the stakeholders. The study has explicitly provided more insight into the inherent challenges of the CSSPS.

It is however expected that the findings of this study will enable the Ministry of Education and the Ghana Education Service, as well as educational planners to put in place measures to ensure the success of the CSSPS. It is further expected that the results of the study will help correct the perceived wrongs perpetuated at the Secretariat in order to increase the confidence stakeholders have in the CSSPS. Based on the findings, we make the following recommendations:

In order to expand access, increase transition and enrolment in SHS, the Ministry of Education and Ghana Education Service should endeavour to expand the infrastructure in the existing Senior High Schools so as to increase access. Also, the government should adopt the community day SHS policy so as to give more students' access to Senior High Schools.

On the issue of purported corruption, it is recommended that the Ministry of Education sets up a special team to investigate the issues and offenders brought to justice. Again, the Ministry of Education and the Ghana Education Service should adopt appropriate measures at the CSSPS Secretariat to curb such menace.

This paper may be limited in the sense that the scope of the study is limited to only an administrative region out of the sixteen (16) regions in Ghana. We therefore call on other researchers to take scholarly look at the other regions if these findings are also recorded there.

References

- Adams, J. S. (1965). Inequity in social exchange. *Advance Experiment in Social Psychology*, 62, 335-343.
- Akyeampong, K. (2010). Fifty years of educational progress and challenges in Ghana. London: CREATE Pathways, University of Sussex.
- Akyeampong, K. (2009). Revisiting Free Compulsory Universal Basic Education (FCUBE) in Ghana. *Comparative Education*, 45(2), 175-195.
- Akyeampong, K., Djangmah, J., Oduro, A., Seidu, A., & Hunt, F. (2007). *Access to basic education in Ghana: The evidence and the issues* Country Analytic Report, CREATE: University of Sussex.
- Akyeampong, K. (2005). Vocationalised secondary education in Ghana. In Lauglo, J. & MacLean, R. (Eds.) *Vocationalisation of secondary education revisited*. The Netherlands: Springer Dordrecht.

- Anyeyore, K. (2011). Regional news. *University deans advocate re-sits of BECE*. Retrieved on May 17, 2012, from http://www.ghanaweb.com.
- Asare, G. (2010). Computerised Schools Selection and Placement System: Local solutions to local problems. Retrieved on November 6, 2011 from http://www.siscogh.com.
- Babah, P.A., Frimpong, A., Mensah, R.O. & Acquah, A. (2020). Computerised School and Selection System in Ghana: challenges and the way forward. *European Journal Educational Sciences*, 7(2), 70-80.
- Best, J. W., & Kahn, J. V. (1998). Research in education. (8th ed.). Boston: Allyn and Bacon.
- Brong Ahafo Regional Education Directorate. (2011). Education management information system (EMIS).
- Baiden-Amissah, A. (2006). *Improving the education sector in Ghana's development agenda*. A paper presented at Baku, Azerbaijan on access to education by African Ministers of Education.
- Colclough, C., Lewin, K., & Chiswick, C. (1993). *Educating all the children: Strategies for primary schooling in the south*. Oxford: Clarendon Press.
- Frimpong, E.D. (2022). GES invites NIB to probe corruption allegations in SHS computer placement. Retrieved from https://www.graphic.com.gh/news/general-news
- Government of Ghana, (2002). *Meeting the challenges of education in the 21st century: Report of the president's committee on reviews of education reforms in Ghana*. Ministry of Education. Accra: Adwinsa Publications (Gh) Ltd.
- Jennings, J. (2007). *Turning point in the history of education in Ghana*. Retrieved on August 8, 2012, from http://www.modernghana.com/news.
- Ministry of Education. (2007). Computerised schools selection and placement System (CSSPS):

 Guidelines for selection and placement of qualified BECE candidates into Senior

 Secondary Schools and Technical/Vocational Institutes. Accra: GES.
- Ministry of Education. (2007). *Computerised schools selection and placement system: Policy guidelines*. Technical working committee, (4th ed.). Accra: GES.
- Nana-Anful. B. (Executive Producer). (2011, September 29). Missions [A Television Broadcast].
 Accra: TV3 Broadcasting Service. Netherlands Programme for Post-Secondary Education and Training Capacity.
- Nkansah, A. (2022). How SHS placement is computed, protocol and more. Retrieved from: https://learningghana.com/shs-placement-computer-cssps/

- NPT. (2007). Nuffic project inception report. Amsterdam: VU University Press
- Owusu-Fordjour, C. (2011). Computerised schools selection and placement system: Corruption and protocol admission. Daily Chronicle Newspaper (No. 18723), pp. 5.
- Pramfi, E. (2012). Biennial Roman Catholic Bishops Conference on education and social integration. *The computerised schools selection and placement system: Challenges and the way forward*. Retrieved on 3/6/12 from http://www.etvghana.com.
- Quist, H. O. (2003). Secondary education: A tool for national development in Ghana. A critical appraisal of the Post-Colonial context. *Journal of Africa Development*, 3(4), 186 210.
- Sarantakos, S. (2005). *Social research* (2nd ed.). China: Palgrave.
- Thompson. W. C., & Casely-Hayford, L. (2008). *The financing and outcomes of education in Ghana*. RECOUP Working Paper No. 16. Oxford: Oxford University Press.
- World Bank. (2008). *Transitions in secondary education in Sub-Saharan Africa: Equity and efficiency issues*. World Bank Working Paper 125. Washington DC: World Bank.
- World Bank. (2004). Books, buildings, and learning outcomes: An impact evaluation of World Bank support to education in Ghana. Washington DC: World Bank Operations Evaluation Department (OED).
- World Bank (1996) Basic Education Sector Improvement Program, Staff Appraisal Report, Republic of Ghana. Population and Human Resources Division, West Central Africa Department, Africa Region, Washington DC: World Bank.